



## EMX-APLP

### Intel® Celeron® & Pentium® Processor Thin Mini ITX Motherboard

- > Intel® Celeron® J3455 & Pentium® N4200 Processor (2M Cache, up to 2.30/2.50GHz)
- > 2 x 204-pin DDR3L 1600 & 1333MHz SO-DIMM supports up to 16GB
- > DP++, HDM/DP, Dual channel 18/24-bits LVDS/co-lay eDP
- > 2 x Intel® i211AT Gigabit Ethernet
- > Realtek ALC662 Audio Codec
- > Realtek ALC105 Stereo Class-D 3W x 2 Audio Amplifier
- > 1 x full size Mini PCIe support mSATA(SATAIII and mSATA by auto switch IC) with 1 x SIM card slot
- > 2 x SATA III, 2 x SATA Power, 5 x USB 2.0 by pin header, 4 x USB 3.0 at I/O
- > 5 x RS232, 1 x RS232/422/485, 16-bit GPIO
- > Mic-in, Line-out, 1 S/PIDF, Optional Infineon SLB9665 TPM 2.0

#### Spec

System	
<b>Processor</b>	Intel®Celeron®J3455 / Pentium® N4200 Processor
<b>System Memory</b>	2 x 204-pin DDR3L 1600 & 1333 MHz SO-DIMM supports up to 16GB
<b>I/O Chip</b>	EC ITE IT8528
<b>BIOS</b>	AMI 128Mbit SPI BIOS
<b>Watchdog Timer</b>	H/W Reset: 1sec. ~ 65535sec./min. and 1sec. or 1min./step
<b>H/W Status Monitor</b>	Monitoring System Temperature and Voltage with Auto Throttling Control
Expansion	
<b>Expansion</b>	1 x full size Mini PCIe support mSATA (SATA III and mSATA By auto switch IC) with 1 x SIM card slot 1 x M.2 (2230) A-Key, support WiFi module
I/O	
<b>USB</b>	6 x USB 2.0 4 x USB 3.0
<b>SATA</b>	2 x SATA Power 2 x SATA III
<b>COM Port</b>	5 x RS232(pin9 without power), 1 x RS232/RS/422/485
<b>DIO</b>	1 x 16-bit GPIO
Display	
<b>Chipset</b>	Intel® SoC integrated Graphics
<b>Resolution</b>	HDMI/DP: 3840 x 2160 @ 30Hz, 2560 x 1600 @ 30Hz LVDS: 1920 x 1080 @ 60Hz
<b>LVDS</b>	2CH 18/24bits LVDS 1920 x 1080 Chrontel. CH7511B eDP to LVDS Converter
Audio	
<b>Chipset</b>	Realtek ALC662 supports 2-CH
<b>Audio Interface</b>	Mic-in, Line-out
<b>Audio Amplifier</b>	2 x Stereo Class-D 3W Audio Amplifier
Ethernet	
<b>Chipset</b>	2 x Intel I211AT Gigabit Ethernet
<b>Ethernet Interface</b>	10/100/1000 Base-Tx GbE compatible
<b>LAN Port</b>	2 x RJ45
Mechanical & Environmental	
<b>Power Requirement</b>	+12V~24V
<b>Power Type</b>	AT/ATX
<b>Operating Temperature</b>	0 ~ 60°C (32 ~ 140°F)
<b>Storage Temperature</b>	-40 ~ 75°C (-40 ~ 167°F)
<b>Operating Humidity</b>	0 ~ 90% Relative Humidity, Non-condensing
<b>Dimension (L x W)</b>	6.69" x 6.69" (170mm x 170mm)
<b>Weight</b>	0.88lbs (0.4Kgs)

#### Ordering

EMX-APLP-3455-A1R  
EMX-APLP-4200-A1R  
Intel® Celeron® J3455 / Pentium® N4200 Processor Thin Mini ITX Motherboard

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660